

**Amendments to the Specification:**

Please replace paragraph number 3, on page 31 with the following replacement paragraph:

As used herein, the term “polymorphic microsatellite” refers to a genetic locus comprising a short (*e.g.*, 1-6 or more nucleotide), tandemly repeated sequence motif. As used herein the term microsatellite is synonymous with short tandem repeat (STR). As used herein “mononucleotide microsatellite” refers to a genetic locus comprising a repeated nucleotide (*e.g.*, A/T). “Dinucleotide microsatellite” refers to a genetic locus comprising a motif of two nucleotides that is tandemly repeated (*e.g.*, CA/TG, CT/GA). “Trinucleotide microsatellite” refers to a genetic locus comprising motif of three nucleotides that is tandemly repeated (*e.g.*, GAA/TTC). “Tetranucleotide microsatellite” refers to a genetic locus comprising a motif of four nucleotides that is tandemly repeated (*e.g.*, TCTA/TAGA [SEQ ID No: 1], AGAT/ATCT [SEQ ID No: 2], AGAA/TTCT [SEQ ID No: 3], AAAG/CTTT [SEQ ID No: 4], AATG/CATT [SEQ ID No: 5], TTTC/GAAA [SEQ ID No: 6], CTTT/AAAG [SEQ ID No: 7] and GATA/TATC [SEQ ID No: 8]). “Pentanucleotide microsatellite” refers to a genetic locus comprising a motif of five nucleotides that is tandemly repeated (*e.g.*, AAAGA/TCTTT [SEQ ID No: 9]). Microsatellites may contain repeat-motif interspersions, or “cryptically simple sequence” (Tautz, D. *et al.* (1986) *Nature* 322(6080):652-656). Such repeat-motif interspersions include simple repeat-motif interspersions wherein the microsatellite contains one or more interspersed repeats with the same length as the tandemly repeated sequence motif, but a different repeat sequence. For example, if the tandemly repeated sequence motif is TCTA [SEQ ID No: 10], a simple repeat-motif interspersion may appear as follows: TCTA(TCTG)<sub>2</sub>(TCTA)<sub>3</sub> [SEQ ID No: 11], wherein the interspersed repeat “TCTG” [SEQ ID No: 12] interrupts the repeat of the TCTA [SEQ ID No: 10] tandemly repeated sequence motif. Repeat-motif interspersions also

include more complex repeat-motif interspersions wherein the repeat motif interspersion is not the same length as the tandemly repeated sequence motif. For example, if the tandemly repeated sequence motif is TCTA [SEQ ID No: 10], the complex repeat-motif interspersion may appear as follows: (TCTA)<sub>3</sub>TA(TCTA)<sub>3</sub>TCA(TCTA)<sub>2</sub> [SEQ ID No: 13], wherein the tandemly repeated sequence motif is interrupted by TA and TCA. Other more complex repeat motif interspersions include the combination of the simple repeat-motif interspersion and the complex repeat-motif interspersion in the same microsatellite. For example, such a complex sequence repeat-motif interspersion may appear as follows:

(TCTA)<sub>n</sub>(TCTG)<sub>o</sub>(TCTA)<sub>3</sub>TA(TCTA)<sub>3</sub>TCA(TCTA)<sub>2</sub>TCCATA(TCTA)<sub>p</sub> [SEQ ID No: 14], wherein both forms of interspersed repeats interrupt the tandemly repeated sequence motif, TCTA. Microsatellites with and without interspersed repeats are encompassed by the term "microsatellites" as used herein.